# Complete Summary

## GUIDELINE TITLE

External cephalic version and reducing the incidence of breech presentation.

## BIBLIOGRAPHIC SOURCE(S)

Royal College of Obstetricians and Gynaecologists (RCOG). External cephalic version and reducing the incidence of breech presentation. London (UK): Royal College of Obstetricians and Gynaecologists (RCOG); 2006 Dec. 8 p. (Guideline; no. 20a). [44 references]

## GUIDELINE STATUS

This is the current release of the guideline.

## COMPLETE SUMMARY CONTENT

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## SCOPE

### DISEASE/CONDITION(S)

Pregnancy with breech presentation

### GUIDELINE CATEGORY

Counseling
Management
Treatment

### CLINICAL SPECIALTY

Family Practice
Obstetrics and Gynecology

### INTENDED USERS

Advanced Practice Nurses
Nurses
Physician Assistants
Physicians

### GUIDELINE OBJECTIVE(S)

To summarize the evidence regarding the routine use of external cephalic version for breech presentation

### TARGET POPULATION

Pregnant women with breech presentation

### INTERVENTIONS AND PRACTICES CONSIDERED

1. External cephalic version (ECV)
    - With or without tocolysis using beta-sympathomimetics
    - Counseling patients on the benefits and risks of ECV
    - Timing of ECV
2. Development of an ECV service, including policies to increase the number of women offered and undergoing ECV

### MAJOR OUTCOMES CONSIDERED

- Proportion of women with a breech presentation offered external cephalic version (ECV)
- Success rates of ECV
- Incidence of breech presentation at delivery
- Complications of/after ECV
- Rate of obstetric intervention during labor
- Caesarean section rate

## METHODOLOGY

### METHODS USED TO COLLECT/SELECT EVIDENCE

Searches of Electronic Databases

### DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

Evidence-based medicine reviews, including the Cochrane Register of Controlled Trials, were searched, together with the TRIP database for relevant randomised controlled trials, systematic reviews and meta-analyses. A search of Medline and PubMed (electronic databases) from 1966 to 2005 was also carried out. Search

words included "breech," "external cephalic version," "fetal," "tocolysis," and "tocolytic agents," and the search was limited to humans and English language.

**NUMBER OF SOURCE DOCUMENTS**

Not stated

**METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE**

Weighting According to a Rating Scheme (Scheme Given)

**RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE**

**Levels of Evidence**

**Ia**: Evidence obtained from meta-analyses of randomised controlled trials

**Ib**: Evidence obtained from at least one randomised controlled trial

**IIa**: Evidence obtained from at least one well-designed controlled study without randomisation

**IIb**: Evidence obtained from at least one other type of well-designed quasi-experimental study

**III**: Evidence obtained from well-designed non-experimental descriptive studies, such as comparative studies, correlation studies, and case studies

**IV**: Evidence obtained from expert committee reports or opinions and/or clinical experience of respected authorities

**METHODS USED TO ANALYZE THE EVIDENCE**

Review of Published Meta-Analyses
Systematic Review with Evidence Tables

**DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE**

Not stated

**METHODS USED TO FORMULATE THE RECOMMENDATIONS**

Expert Consensus

**DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS**

Not stated

## RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

The recommendations were graded according to the level of evidence upon which they were based. The grading scheme used was based on a scheme formulated by the Clinical Outcomes Group of the National Health Service Executive.

**Grade A** - Requires at least one randomised controlled trial as part of a body of literature of overall good quality and consistency addressing the specific recommendation. (Evidence levels Ia, Ib)

**Grade B** - Requires the availability of well controlled clinical studies but no randomised clinical trials on the topic of recommendations. (Evidence levels IIa, IIb, III)

**Grade C** - Requires evidence obtained from expert committee reports or opinions and/or clinical experiences of respected authorities. Indicates an absence of directly applicable clinical studies of good quality. (Evidence level IV)

## COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

## METHOD OF GUIDELINE VALIDATION

External Peer Review
Internal Peer Review

## DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

Following discussion in the Guidelines and Audit Committee, each green-top guideline is formally peer reviewed. At the same time the draft guideline is published on the Royal College of Obstetricians and Gynaecologists Web site for further peer review discussion before final publication.

The names of author(s) and nominated peer reviewers are included in the original guideline document.

# RECOMMENDATIONS

## MAJOR RECOMMENDATIONS

*In addition to these evidence-based recommendations, the guideline development group also identifies points of best clinical practice in the original guideline document*.

Levels of evidence (**Ia-IV**) and grading of recommendations (**A-C**) are defined at the end of the "Major Recommendations" field.

**External Cephalic Version (ECV)**

**What Is the Impact of ECV on the Incidence of Breech Presentation at Delivery?**

**A** - Women should be counselled that ECV reduces the chance of breech presentation at delivery.

**What is the Effect of ECV on the Caesarean Section Rate?**

**A** - Women with a breech baby should be informed that attempting ECV lowers their chances of having a caesarean section.

**B** - Labour with a cephalic presentation following ECV is associated with a higher rate of obstetric intervention than when ECV has not been required.

**What is the Success Rate of ECV and What Influences It?**

**B** - Women should be counselled that, with a trained operator, about 50% of ECV attempts will be successful but this rate can be individualised for them.

**Does the Use of Tocolysis Improve the Success Rate of ECV?**

**A** - The use of tocolysis with beta-sympathomimetics may be offered to women undergoing ECV as it has been shown to increase the success rate.

A simple protocol is to offer a slow intravenous or subcutaneous bolus of salbutamol or terbutaline either routinely or if an initial ECV attempt has failed. Women should be advised of the adverse effects of tocolysis with beta-2 agonists. (Evidence level Ia)

**When Should ECV Be Offered?**

**B** - ECV should be offered from 36 weeks in nulliparous women and from 37 weeks in multiparous women.

**Is ECV safe?**

**B** - Women should be counselled that ECV has a very low complication rate.

ECV should be performed where ultrasound to enable fetal heart rate visualisation, cardiotocography and theatre facilities are available. Cardiotocography should be performed after the procedure. Kleihauer testing is unnecessary but anti-D immunoglobulin is normally offered to rhesus-negative women. Given the low complication rate, particularly when compared with labour, starvation, anaesthetic premedication, and intravenous access are all unnecessary.

**Is ECV Painful?**

ECV can be painful, with few women experiencing no discomfort and around 5% reporting high pain scores. The procedure may need to be stopped because of this.

**What Are Contraindications to ECV?**

**C** - There are few absolute contraindications to ECV.

Absolute contraindications for ECV that are likely to be associated with increased mortality or morbidity:

- Where caesarean delivery is required
- Antepartum haemorrhage within the last 7 days
- Abnormal cardiotocography
- Major uterine anomaly
- Ruptured membranes
- Multiple pregnancy (except delivery of second twin)

Relative contraindications where ECV might be more complicated:

- Small-for-gestational-age fetus with abnormal Doppler parameters
- Proteinuric pre-eclampsia
- Oligohydramnios
- Major fetal anomalies
- Scarred uterus
- Unstable lie

**Increasing the Uptake of ECV**

**B** - Local policies should be implemented to actively increase the number of women offered and undergoing ECV.

**Alternatives To ECV**

**A** - There is insufficient evidence to support the use of postural management as a method of promoting spontaneous version over ECV.

**A** - Moxibustion should not be recommended as a method of promoting spontaneous version over ECV.

**Developing An ECV Service**

**C** - An ECV service, provided by appropriately trained clinicians, should be available to all women with a breech presentation at term.

**Definitions**:

**Grading of Recommendations**

**Grade A** - Requires at least one randomised controlled trial as part of a body of literature of overall good quality and consistency addressing the specific recommendation. (Evidence levels Ia, Ib)

**Grade B** - Requires the availability of well controlled clinical studies but no randomised clinical trials on the topic of recommendations. (Evidence levels IIa, IIb, III)

**Grade C** - Requires evidence obtained from expert committee reports or opinions and/or clinical experiences of respected authorities. Indicates an absence of directly applicable clinical studies of good quality. (Evidence level IV)

**Levels of Evidence**

**Ia**: Evidence obtained from meta-analyses of randomised controlled trials

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### CLINICAL ALGORITHM(S)

None provided

## EVIDENCE SUPPORTING THE RECOMMENDATIONS

### TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of supporting evidence is identified and graded for each recommendation (see "Major Recommendations" field).

## BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

### POTENTIAL BENEFITS

Appropriate use of external cephalic version may reduce the chance of breech presentation at term and therefore the associated risks, particularly of avoidable cesarean section.

### POTENTIAL HARMS

- External cephalic version (ECV) has a very low complication rate. A few case reports exist of complications such as placental abruption, uterine rupture, and fetomaternal haemorrhage.
- ECV does not appear to promote labour, but is associated with alterations in fetal parameters. These include a fetal bradycardia and a nonreactive cardiotocograph that are almost invariably transient, alterations in umbilical artery and middle cerebral artery waveforms, and an increase in amniotic fluid volume. The significance of these is unknown.
- ECV can be painful, with few women experiencing no discomfort and around 5% reporting high pain scores.

## CONTRAINDICATIONS

### CONTRAINDICATIONS

Absolute contraindications for external cephalic version (ECV) that are likely to be associated with increased mortality or morbidity:

- Where caesarean delivery is required
- Antepartum haemorrhage within the last 7 days
- Abnormal cardiotocography
- Major uterine anomaly
- Ruptured membranes
- Multiple pregnancy (except delivery of second twin)

Relative contraindications where ECV might be more complicated:

- Small-for-gestational-age fetus with abnormal Doppler parameters
- Proteinuric pre-eclampsia
- Oligohydramnios
- Major fetal anomalies
- Scarred uterus
- Unstable lie

## QUALIFYING STATEMENTS

### QUALIFYING STATEMENTS

- These guidelines are "systematically developed statements which assist clinicians and patients in making decisions about appropriate treatment for specific conditions." Each guideline is systematically developed using a standardised methodology. Exact details of this process can be found in Clinical Governance Advice No. 1: Guidance for the Development of RCOG Green-top Guidelines (See the "Availability of Companion Documents" field in this summary.)
- These recommendations are not intended to dictate an exclusive course of management or treatment. They must be evaluated with reference to individual patient needs, resources and limitations unique to the institution

and variations in local populations. It is hoped that this process of local ownership will help to incorporate these guidelines into routine practice. Attention is drawn to areas of clinical uncertainty where further research may be indicated.

## IMPLEMENTATION OF THE GUIDELINE

### DESCRIPTION OF IMPLEMENTATION STRATEGY

An implementation strategy was not provided.

### IMPLEMENTATION TOOLS

Audit Criteria/Indicators

For information about availability, see the "Availability of Companion Documents" and "Patient Resources" fields below.

## INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

### IOM CARE NEED

Getting Better
Staying Healthy

### IOM DOMAIN

Effectiveness
Patient-centeredness

## IDENTIFYING INFORMATION AND AVAILABILITY

### BIBLIOGRAPHIC SOURCE(S)

Royal College of Obstetricians and Gynaecologists (RCOG). External cephalic version and reducing the incidence of breech presentation. London (UK): Royal College of Obstetricians and Gynaecologists (RCOG); 2006 Dec. 8 p. (Guideline; no. 20a). [44 references]

### ADAPTATION

Not applicable: The guideline was not adapted from another source.

### DATE RELEASED

2006 Dec

### GUIDELINE DEVELOPER(S)

Royal College of Obstetricians and Gynaecologists - Medical Specialty Society

## SOURCE(S) OF FUNDING

Royal College of Obstetricians and Gynaecologists

## GUIDELINE COMMITTEE

Guidelines and Audit Committee of the Royal College of Obstetricians and Gynaecologists

## COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

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## FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Guideline authors are required to complete a "declaration of interests" form.

## GUIDELINE STATUS

This is the current release of the guideline.

## GUIDELINE AVAILABILITY

Electronic copies: Available in Portable Document Format (PDF) from the Royal College of Obstetricians and Gynaecologists (RCOG) Web site.

Print copies: Available from the Royal College of Obstetricians and Gynaecologists (RCOG) Bookshop, 27 Sussex Place, Regent's Park, London NW1 4RG; Telephone: +44 020 7772 6276; Fax, +44 020 7772 5991; e-mail: bookshop@rcog.org.uk. A listing and order form are available from the RCOG Web site.

## AVAILABILITY OF COMPANION DOCUMENTS

The following are available:

- Development of RCOG green-top guidelines: policies and processes. Clinical Governance Advice No 1a. 2006 Nov. Available from the Royal College of Obstetricians and Gynaecologists (RCOG) Web site.
- Development of RCOG green-top guidelines: producing a scope. Clinical Governance Advice No 1b. 2006 Nov. Available from the Royal College of Obstetricians and Gynaecologists (RCOG) Web site.
- Development of RCOG green-top guidelines: producing a clinical practice guideline. Clinical Governance Advice No 1c. 2006 Nov. Available from the Royal College of Obstetricians and Gynaecologists (RCOG) Web site.
- Searching for evidence. Clinical Governance Advice No 3. 2001 Oct. Available from the Royal College of Obstetricians and Gynaecologists (RCOG) Web site.

Additionally, auditable standards can be found in section 8 of the original guideline document.

### PATIENT RESOURCES

None available

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